

REMARKS

Claims 32 and 33 have been amended to overcome any perceived indefiniteness. Claim 32 has been amended to recite "until it displays a response behavior to said resource" instead of "after it displays a response behavior to said resource". Basis for this amendment can be found on pages 20-21 bridging paragraph. Claim 33 has been amended to delete the word "in" after the word "wherein". No new matter has been introduced by this amendment. Entry and reconsideration are respectfully requested.

The rejection of claims 32 and 33 under 35 USC 112, first paragraph, as failing to comply with the written description requirement is respectfully traversed. The Office states that the claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Office then states that newly presented claims 32 and 33 include step (b) that recites "drawing air from around a target chemical over said organism after it displays a response behavior to said resource" and the originally filed specification and claims state that the organism is exposed to the target chemical while it contacts or is exposed to the biological resource

referring to pages 20 and 21 of the originally filed specification and originally filed claims 17 and 18.

Applicants respectfully submit that newly amended claims 32 and 33 no longer contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended claim 32 step (b) now states "drawing air from around a target chemical over said organism until it displays a response behavior to said resource". The specification clearly describes and enables step (b) in the bridging paragraph of pages 20 and 21. Withdrawal of the instant rejection is respectfully requested.

The rejection of claims 32 and 33 under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is respectfully traversed. The Office states that claim 32 includes the steps of (a) presenting a freely moving organism to a biological resource. Step (b) of the method requires exposing the organism to a target chemical after it "displays a response to said resource". Step (c) requires removing the organism from the resource after it "displays a

response behavior to said resource". The Office concludes that if the conditions recited in steps (b) and (c) are followed, the organism would never be exposed to the target chemical and requires clarification and/or correction.

Applicants respectfully submit that newly amended claims 32 and 33 no longer fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Amended claim 32 step (b) now states "drawing air from around a target chemical over said organism until it displays a response behavior to said resource". The specification clearly describes and enables step (b) in the bridging paragraph of pages 20 and 21. Withdrawal of the instant rejection is respectfully requested.

The rejection of claims 32 and 33 under 35 USC 103 (a) as being unpatentable over Biederman (US 4,022,054) in view of Lambersten et al. (US 4,807,706) is respectfully traversed. The Office states that the reference of Biederman discloses a method for training organisms (gerbil) in the immediate presence of a stimuli (electric shock), drawing air from around a target chemical over the organism while exposed to the stimuli, removing the stimuli from the organism after it displays a response behavior to the stimuli. The Office then states that the claims

differ by reciting that the stimuli is a biological resource rather than an electrical shock as disclosed by the reference to Biederman. The Office then states that Lambersten et al. discloses that it is known in the art of animal experimental psychology to employ food rewards or electric shock for training or conditioning animals referring to column 6, lines 28-39. The Office states that in view of this teaching, in absence of a showing of criticality and/or unexpected results, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the training of the organism fo the reference of Biederman to employ a food stimulus rather than an electric shock for the known and expected result of providing an alternative means recognized in the art to achieve the same result. The Office then states that this technique is conventional in the art and known as a classical conditioning or Pavlovian conditioning and would result in a trained organism that would display behavior to the target chemical without the presence of a biological resource. The Office then states that with respect to the length of time for the exposures and /or number of exposures, it would have been obvious to one of ordinary skill in the art to determine the optimum lengths and/or number of exposure steps required to condition the organism based

on considerations such as the specific organism employed and /or the target chemical to be detected by the organism.

Applicants respectfully submit that the combination of Biederman in view of Lambersten et al fails to render the instantly claimed invention *prima facie* obvious. The combination of Biederman in view of Lambersten teach that if an animal gets the response correct there is an award or avoidance of a painful stimulus. In the presently claimed invention the organism associates the odor of the chemical with a biological resource. The organism does not associate the odor with a painful stimulus or a reward. Once the animal is trained it responds without the presence of a biological resource. Biederman and Lambersten both teach that the learned behavior of the trained animal always includes the stimulus used to train such as a reward or the lack of a painful stimulus. See column 5, lines 26-49 or Biederman and column 6, lines 29-39 of Lambersten et al. No where does the presently claimed invention teach a step of always including the painful stimulus or a food reward.

Furthermore, Lambersten is non-analogous art. Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the

field of the inventors endeavor, whether the reference is reasonably pertinent to the particular problem. See *In re Clay*, 23 USPQ 2d 1058 (CAFC, 1992). Lambersten relates to breathable fire extinguishing gas mixtures. The reference is not reasonably pertinent to the problem of training organisms to detect at least one chemical by associating the chemical to a biological resource. One of ordinary skill in the art at the time the claimed invention was made would not look to the Lambersten reference for teachings for a method to train organisms to detect at least one chemical.

The combination of references fails to teach the instantly claimed method for training organisms to detect at least one chemical. The primary reference fails to teach a method where an organism is exposed to chemical in the presence of a biological resource to produce an organism that displays the appropriate behavior associated with the resource in the presence of the chemical when there is no biological resource present. The secondary reference fails to cure this deficiency as stated above. The combination is merely an invitation to experimentation without any reasonable expectation of success. Withdrawal of the instant rejection is respectfully requested.

Applicants note that claims 24-31 AND 34-37 are allowed.

It is believed that all of the claims are in condition for allowance. Accordingly, it is respectfully requested that the instant application be allowed to issue. If any issues remain to be resolved, the Examiner is invited to telephone the undersigned at the number below.

In the event this paper is deemed not timely filed, the undersigned hereby petitions for an appropriate extension of time. Please charge any fees, which may be required by this paper or at any time during prosecution of the instant application, or credit any overpayment, to deposit account 50-2134.

July 23, 2004
DATE

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CERTIFICATE OF FILING VIA FACSIMILE

The undersigned hereby certifies that the attached **AMENDMENT AFTER FINAL REJECTION and Petition for a One (1) Month Extension of Time**, was this day, July 23, 2004, filed in the United States Patent and Trademark Office via facsimile to facsimile number (703) 872-9306. Total Pages: 18

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